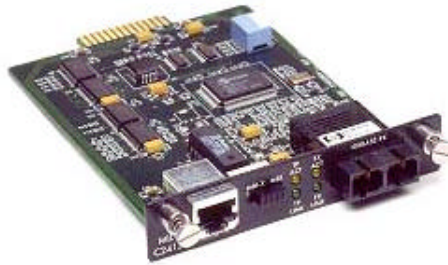


## Fast Ethernet Media Converters MIL-C2000 Series



MiLAN's 100BASE-TX to 100BASE-FX Media Converters convert UTP to fiber and extend network distances up to 100km, in Full-Duplex operation. Providing a simple and affordable means of migrating network infrastructure to higher bandwidths and reliably introducing new applications.

### Fiber Connectivity

Connection types in SC, ST, and MT-RJ for Multi-mode; SC and MT-RJ for Single-mode

### Auto MDI/MDIX

Automatic cable detection for adjusting 10/100BASE-TX ports to straight-through or crossover cables during installation, allowing direct connectivity to PCs or switches

### Simple Diagnostics

Status LEDs for indicating port status, including Fiber Link, Fiber Activity, Twisted Pair Link, and Twisted Pair Activity

### Standalone or Modular Versions

Standalone MIL-C211x series serve individual media converter requirements; MIL-C241x modules integrate with MiLAN's MIL-9100X Eight-slot or MIL-9200X Sixteen-slot Media Conversion Chassis for managed media conversion

### Easy Management

MIL-C241x modular units supported by MiLAN's LinkSentry™ SNMP management application for remote configuration and lost link alarming; chassis' are configurable as primary or cascade units



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# Fast Ethernet Media Converters

## MIL-C2000 Series

### Specifications

#### MIL-C211X Series "Standalone"

**Dimensions:** 73.66 mm x 88.90 mm x 25.40 mm (2.90" W x 3.50" D x 1.00" H)

**Weight:** .1270 Kg (.28 lbs)

**Operating Temperature:** 0 to 50°C (32°F to 122°F)

**Storage Temperature:** -25°C to 70°C (-13°F to 158°F)

**Operating Humidity:** 10% to 95% (non-condensing)

**Altitude:** 0 to 12,000 Feet (3660m)

**Input voltage:** 100 VAC @ 60 Hz

**Input Current:** 1A

**Functional Standards:** Compatible with IEEE802.3u

**Emissions/Safety:** UL 1950, CSA 22.2 No. 950, EN60950 (TUV), FCC

Class A, EN55022 Class B, EN50082-1, CE

#### MIL-C241X Series "Modular"

**Dimensions:** 93.98 mm x 127.00 mm x 1.52 mm (3.70" W x 5.00" D x .06" H)

**Weight:** .0978 Kg (.214 lbs)

**Operating Temperature:** 0 to 50°C (32°F to 122°F)

**Storage Temperature:** -20°C to 70°C (-4°F to 158°F)

**Operating Humidity:** 5% to 90% (non-condensing)

**Altitude:** 0 to 12,000 Feet (3660m)

**Powered via backplane:**

**Input voltage:** +5V +/-5%

**Input Current:** 1A

**Functional Standards:** Compatible with IEEE802.3u

**Emissions/Safety:** UL 1950, CSA 22.2 No. 950, EN60950 (TUV), FCC

Class A, EN55022 Class B, EN50082-1, CE

### Packet Transmission Characteristics

Round Trip Delay: 0.3?s Maximum

Bit Error Rate: <10<sup>-12</sup>

### Fiber Port Characteristics

*Interface: Multi-mode*

Speed: 100BASE-FX (2km)

Transmitter: Wavelength 1310nm

Output Power (50 or 62.5?m): -16.8dBm

Receiver: Wavelength 1310nm

Sensitivity: -34 dBm

*Interface: Single mode*

Speed: 100BASE-FX Single mode (15km)

Transmitter: Wavelength 1310nm

Output Power (8 or 9/125?m): -13dBm

Receiver: Wavelength 1310nm

Sensitivity: -34dBm

*Interface: Single mode*

Speed: 100BASE-FX Single mode (40km)

Transmitter: Wavelength 1310nm

Output Power (9/125?m): -2dBm

Receiver: Wavelength 1310nm

Sensitivity: -37dBm

Speed: 100BASE-FX Single mode (60km)

Transmitter: Wavelength 1550nm

Output Power (8 or 9/125?m): -1.8dBm

Receiver: Wavelength 1550nm

Sensitivity: -37dBm

Speed: 100BASE-FX Single mode (100km)

Transmitter: Wavelength 1550nm

Output Power (8 or 9/125?m): 3dBm

Receiver: Wavelength 1550nm

Sensitivity: -37dBm

### Twisted Pair Port Characteristics

	Min.	Typical	Max.
UTP Differential			
Output Voltage	950mv	980mv	1050mv
Overshoot Voltage	x	4%	5%
Single Amplitude Symmetry	98	1.0062	1.02
Rise and Fall Time			
Rise	3.0ns	4.6ns	5.0ns
Fall	3.0ns	4.2ns	5.0ns
Rise and Fall Symmetry	0.4ns	0.5ns	

### Ordering Information

#### Media Converter - Standalone

MIL-C2112:	100BASE-TX/100BASE-FX ST MMF 2km
MIL-C2113	100BASE-TX/100BASE-FX SC MMF 2km
MIL-C2113-15	100BASE-TX/100BASE-FX SC SMF 15km
MIL-C2113-40	100BASE-TX/100BASE-FX SC SMF 40km
MIL-C2113-60	100BASE-TX/100BASE-FX SC SMF 60km
MIL-C2113-100	100BASE-TX/100BASE-FX SC SMF 100km
MIL-C2114	100BASE-TX/100BASE-FX MT-RJ MMF 2km
MIL-C2114-15	100BASE-TX/100BASE-FX MT-RJ SMF 15km

#### Media Converter - Modular

MIL-C2412	100BASE-TX/100BASE-FX ST MMF 2km
MIL-C2413	100BASE-TX/100BASE-FX SC MMF 2km
MIL-C2413-15	100BASE-TX/100BASE-FX SC SMF 15km
MIL-C2413-40	100BASE-TX/100BASE-FX SC SMF 40km
MIL-C2413-60	100BASE-TX/100BASE-FX SC SMF 60km
MIL-C2413-100	100BASE-TX/100BASE-FX SC SMF 100km
MIL-C2414	100BASE-TX/100BASE-FX MT-RJ MMF 2km
MIL-C2414-15	100BASE-TX/100BASE-FX MT-RJ SMF 15km

### Warranty

Comprehensive 5 years

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